

### **Abstract of the disclosure**

The present invention discloses a mobile electronic device, having a radio receiver (28), an amplifier (24) and an audio connector (20) for connecting to a headphone (2). Said audio connector (2) comprises at least one first contact and at least one second contact, wherein said first contact is connected to ground and to said radio receiver (28), and said second contact is connected to said amplifier (24). The electronic device is characterized by a band-pass filter component (26) interconnected between said first contact and said radio receiver (28) so that only a predefined frequency range can pass to the radio receiver, preventing cross talk interference from transmitters operated in proximity.